

Title (en)

SOLID-STATE BATTERY INCLUDING AN ELECTROLYTE MADE OF A CROSS-LINKED SOLID POLYMER MATERIAL

Title (de)

FESTSTOFFBATTERIE MIT EINEM AUS EINEM VERNETZTEN FESTPOLYMER MATERIAL HERGESTELLTEM ELEKTROLYT

Title (fr)

BATTERIE ENTIÈREMENT SOLIDE COMPRENANT UN ÉLECTROLYTE EN MATÉRIAU POLYMÈRE SOLIDE RÉTICULE

Publication

**EP 3164903 A1 20170510 (FR)**

Application

**EP 15745536 A 20150701**

Priority

- FR 1456273 A 20140701
- FR 2015051814 W 20150701

Abstract (en)

[origin: WO2016001584A1] The invention relates to a method for manufacturing a thin-layer solid-state battery including the following consecutive steps: a) depositing a layer including at least one anode material on the conductive substrate thereof; b) depositing a layer including at least one cathode material on the conductive substrate thereof; c) depositing on at least one layer obtained in step a) and/or b) a layer including at least one solid electrolyte material having a thickness smaller than 10 µm, preferably smaller than 5 µm, and even more preferably smaller 2 µm, the solid electrolyte material including a cross-linked solid polymer material comprising ion groupings; d) consecutively stacking the following face-to-face: either a layer of anode material coated with a layer of solid electrolyte material obtained in step c) with a layer of cathode material optionally coated with a layer of solid electrolyte material obtained in step c), or a layer of cathode material coated with a layer of solid electrolyte material obtained in step c) with a layer of anode material optionally coated with a layer of solid electrolyte material obtained in step c); and e) performing a thermal treatment and/or a mechanical compression of the stack obtained in step d) in order to obtain a thin-layer solid-state battery.

IPC 8 full level

**H01M 10/052** (2010.01); **H01M 10/0565** (2010.01); **H01M 10/0585** (2010.01)

CPC (source: EP KR US)

**H01M 10/052** (2013.01 - EP KR US); **H01M 10/0525** (2013.01 - US); **H01M 10/0565** (2013.01 - EP KR US); **H01M 10/0585** (2013.01 - EP KR US); **H01M 2300/0082** (2013.01 - EP KR US); **Y02E 60/10** (2013.01 - EP KR); **Y02P 70/50** (2015.11 - EP KR)

Citation (search report)

See references of WO 2016001584A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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